

**REMARKS**

Favorable reconsideration of this application is respectfully requested in view of the claim amendments and following remarks.

Status of Claims

Claims 7, 8, 11, 12, 20, 23 are canceled.

Claims 1-6, 9, 10, 13-18, 21, 22, 24 and 25 are currently pending in the application of which claims 1, 16, 17, 21 and 24 are independent.

Claims 1-11 and 13-25 are rejected.

Claim 12 is objected to.

No new matter has been introduced by way of the amendments above. Entry thereof is therefore respectfully requested.

Summary of the Office Action

Claim 12 was objected to as being dependent on a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 17-20 were rejected under 35 U.S.C. §101 as allegedly being directed to non-statutory subject matter.

Claims 24 and 25 were rejected under 35 U.S.C. §102(e) as allegedly being anticipated by U.S. Patent No. 6,771,746 to Shambaugh et al. (hereinafter “Shambaugh”).

Claims 24 and 25 were rejected under 35 U.S.C. §102(e) as allegedly being anticipated by U.S. Patent No. 7,280,651 to Anderson (hereinafter “Anderson”).

Claims 1, 4-10 and 13-23 were rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Shambaugh in view of U.S. Patent No. 7,382,868 to Moore et al. (hereinafter “Moore”).

Claims 1, 2, 4-10 and 13-23 were rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Anderson in view of U.S. Patent No. 7,382,868 to Moore et al. (hereinafter “Moore”).

Claims 2 and 3 were rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Shambaugh in view of Moore, and further in view of U.S. Patent No. 6,990,179 to Merrow et al. (hereinafter “Merrow”).

Claim 11 was rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Shambaugh in view of Moore, and further in view of U.S. Patent No. 6,850,766 to Lau et al. (hereinafter “Lau”).

Claim 3 was rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Anderson in view of Moore, and further in view of Merrow.

Claim 11 was rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Anderson in view of Moore, and further in view of Lau.

The rejections above are respectfully traversed for at least the reasons set forth below.

Allowable Subject Matter

The indication that claim 12 contains allowable subject matter is noted with appreciation. Independent claims 1, 16, 17, 21 and 24 have been amended to include the features of claim 12 and intervening claim 7. Accordingly, claims 1-6, 9, 10, 13-18, 21, 22, 24 and 25 are allowable.

Claim Rejection Under 35 U.S.C. §101

Claims 17-20 were rejected under 35 U.S.C. §101 as allegedly being directed to non-statutory subject matter.

Claims 17-20 have been amended to cover only statutory embodiments by reciting a “non-transitory” medium. Accordingly, claims 17-20 are statutory.

Claim Rejection Under 35 U.S.C. §102

The test for determining if a reference anticipates a claim, for purposes of a rejection under 35 U.S.C. § 102, is whether the reference discloses all the elements of the combination in the claim, or the mechanical equivalents thereof functioning in substantially the same way to produce substantially the same results. As noted by the Court of Appeals for the Federal Circuit in *Lindemann Maschinenfabrick GmbH v. American Hoist and Derrick Co.*, 221 USPQ 481, 485 (Fed. Cir. 1984), in evaluating the sufficiency of an anticipation rejection under 35 U.S.C. § 102:

Anticipation requires the presence in a single prior art reference disclosure of each and every element of the claims.

Therefore, if the cited reference does not disclose each and every element of the claim, then the cited reference fails to anticipate the claim and, thus, the claim is distinguishable over the cited reference.

Claims 24 and 25 were rejected under 35 U.S.C. §102(b) as allegedly being anticipated by Shambaugh.

Claims 24 and 25 were rejected under 35 U.S.C. §102(b) as allegedly being anticipated by Anderson. Claim 12 was objected to as including allowable subject matter. Independent claim 24 has been amended to recite the features of claims 7 and 12, and thus claims 24 and 25 are allowable.

Claim Rejections Under 35 U.S.C. §103(a)

The test for determining if a claim is rendered obvious by one or more references for purposes of a rejection under 35 U.S.C. § 103 is set forth in *KSR International Co. v. Teleflex Inc.*, 550 U.S. 398, 82 USPQ2d 1385 (2007):

“Under §103, the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved. Against this background the obviousness or nonobviousness of the subject matter is determined. Such secondary considerations as commercial success, long felt but unsolved needs, failure of others, etc., might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented.” Quoting *Graham v. John Deere Co. of Kansas City*, 383 U.S. 1 (1966).

As set forth in MPEP 2143.03, to ascertain the differences between the prior art and the claims at issue, “[a]ll claim limitations must be considered” because “all words in a claim must be considered in judging the patentability of that claim against the prior art.” *In re Wilson*, 424 F.2d 1382, 1385. According to the Examination Guidelines for Determining Obviousness Under 35 U.S.C. 103 in view of *KSR International Co. v. Teleflex Inc.*, Federal Register, Vol. 72, No. 195, 57526, 57529 (October 10, 2007), once the *Graham* factual

inquiries are resolved, there must be a determination of whether the claims would have been obvious to one of ordinary skill in the art based on any one of the following proper rationales:

(A) Combining prior art elements according to known methods to yield predictable results; (B) Simple substitution of one known element for another to obtain predictable results; (C) Use of known technique to improve similar devices (methods, or products) in the same way; (D) Applying a known technique to a known device (method, or product) ready for improvement to yield predictable results; (E) “Obvious to try”—choosing from a finite number of identified, predictable solutions, with a reasonable expectation of success; (F) Known work in one field of endeavor may prompt variations of it for use in either the same field or a different one based on design incentives or other market forces if the variations would have been predictable to one of ordinary skill in the art; (G) Some teaching, suggestion, or motivation in the prior art that would have led one of ordinary skill to modify the prior art reference or to combine prior art reference teachings to arrive at the claimed invention. *KSR International Co. v. Teleflex Inc.*, 550 U.S. 398, 82 USPQ2d 1385 (2007).

Furthermore, as set forth in *KSR International Co. v. Teleflex Inc.*, quoting from *In re Kahn*, 441 F.3d 977, 988 (CA Fed. 2006), “[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasonings with some rational underpinning to support the legal conclusion of obviousness.”

Therefore, if the above-identified criteria and rationales are not met, then the cited reference(s) fails to render the claims obvious and, thus, the claims are distinguishable over the cited reference(s).

**Claims 1, 4-10 and 13-23**

Claims 1, 4-10 and 13-23 were rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Shambaugh in view of Moore.

Claims 7, 8, 20 and 23 are canceled. Claims 1, 4-6, 9, 10, 13-19, 21 and 22 are allowable because independent claims 1, 16, 17 and 21 have been amended to include the features of claims 7 and 12, which were indicated as including allowable subject matter.

Claim 12 was objected as including allowable subject matter. Claim 1 has been amended to incorporate the features of intervening claim 7 and claim 12. to make claim 1 allowable.

As indicated by the Examiner, claim 12 includes allowable subject matter, and thus Shambaugh in view of Moore does not disclose the features of claims 7 and 12. Independent claims 16, 17, 21, 24 recite features similar to the features added to claim 1. Accordingly, claims 1, 4-10 and 13-23 are believed to be allowable.

**Claims 1, 2, 4-10 and 13-23**

Claims 1, 2, 4-10 and 13-23 were rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Anderson in view of Moore.

Claims 7, 8, 20 and 23 are canceled. Claims 1, 2, 4-6, 9, 10, 13-19, 21 and 22 are allowable because independent claims 1, 16, 17 and 21 have been amended to include the features of claims 7 and 12, which were indicated as including allowable subject matter.

**Claims 2 and 3**

Claims 2 and 3 were rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Shambaugh in view of Moore, and further in view of Merrow. Claims 2 and 3 are believed to be allowable at least for the reasons claim 1 is believed to be allowable.

**Claim 11**

Claim 11 was rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Shambaugh in view of Moore, and further in view of Lau. Claim 11 is canceled herein.

**Claim 3**

Claim 3 was rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Anderson in view of Moore, and further in view of Merrow. Claim 3 is believed to be allowable at least for the reasons claim 1 is believed to be allowable.

**Claim 11**

Claim 11 was rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Anderson in view of Moore, and further in view of Lau. Claim 11 is canceled herein.

PATENT

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Conclusion

In light of the foregoing, withdrawal of the rejections of record and allowance of this application are earnestly solicited. Should the Examiner believe that a telephone conference with the undersigned would assist in resolving any issues pertaining to the allowability of the above-identified application, please contact the undersigned at the telephone number listed below. Please grant any required extensions of time and charge any fees due in connection with this request to Deposit Account No. 08-2025.

Respectfully submitted,

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By /Ashok K. Mannava/  
Ashok K. Mannava  
Registration No. 45,301  
(703) 652-3822

MANNAVA & KANG, P.C.  
11240 Waples Mill Road  
Suite 300  
Fairfax, VA 22030  
(703) 865-5150 (facsimile)